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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,166	10/21/2005	Ronan F. Power	180-050	6592
1009	7590	10/17/2008	EXAMINER	
KING & SCHICKLI, PLLC			BADR, HAMID R	
247 NORTH BROADWAY				
LEXINGTON, KY 40507				
			ART UNIT	PAPER NUMBER
			1794	
			MAIL DATE	DELIVERY MODE
			10/17/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/554,166	<b>Applicant(s)</b> POWER, RONAN F.	
	<b>Examiner</b> HAMID R. BADR	<b>Art Unit</b> 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/21/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/14/2005, 6/29/2006</u> .                                   | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 14-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claims 14-21 are indefinite for “a suitable carrier”. It is unclear what is meant by “suitable” or what type of carriers are considered suitable.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Labeille et al. (US 2002/0037342; hereinafter R1).
3. R1 discloses a multi-enzyme product containing glucoamylase, proteolytic and xylanase activities. The product is prepared through the solid state fermentation of wheat bran using *Aspergillus niger* strain. The product is useful as animal feed.  
  
(Abstract).

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4. R1 discloses that wheat bran is used as the starting material which is moistened and heat treated to pasteurize it [0025, 0027].

5. R1 teaches adjusting the pH of the substrate to improve the efficiency of the pasteurization process and the initiation of the desired fermentation [0028].

6. R1 discloses that the fermentor should be aerated in order to supply the oxygen necessary for fermentation and to avoid the excessive accumulation of carbon dioxide produced by fermentation [0035]. Given that the fungus utilizes the carbon source for metabolism, a substantial quantity of dry matter is lost in the form of carbon dioxide. As a result the nitrogen content of the substrate will increase due to the loss of dry matter. The quality and digestibility of the protein source will improve due to the action of the proteolytic enzyme. Therefore, the decrease in dry matter and fat content and the increase in nitrogen content with an improved nutritional quality are all inherent in the fermentation process.

7. R1 discloses that the product of the fermentation process is a solid product [0037]. Given that the substrate and the fungus interact to produce a solid product, the solid state fermentation concept applies.

8. R1 discloses that a possible use of the product is the production of wheat-based feed for monogastric animals such as poultry and pigs.[0038]

9. R1 teaches of freezing or drying the product for storage [0039]

10. R1 teaches that at the end of the fermentation process, the enzymes produced during the course of fermentation can be solublized in aqueous medium and separated

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by filtration [0082]. Given that the produced enzymes can be separated from the fermented substrate, it is clear that it can be frozen or dried for future use.

11. R1 discloses that an increase is observed in the soluble nitrogen content of the fermented bran due to the proteolytic activity. [0143] The results indicate that the fermented brans are capable of hydrolyzing wheat flour with the same efficacy as a standard preparation [0144]. Therefore, it is clear that a composition containing a protease can be added to animal feed to increase the digestibility of proteins in the feed.

12. R1 discloses that the incorporation of fermented bran into poultry feed made it possible significantly to reduce the feed conversion ratio [0159]. This means that the animal gains weight while consuming a lower quantity of feed.

13. R1 discloses that the use of the fermented bran nevertheless has the advantage of being less expensive than the use of the commercial enzymatic product [0159].

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAMID R. BADR whose telephone number is (571)270-3455. The examiner can normally be reached on M-T 5:00 to 3:30 (Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hamid R Badr  
Examiner  
Art Unit 1794

/Callie E. Shosho/  
Supervisory Patent Examiner, Art Unit 1794